1632

Charles

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/724,693A

DATE: 02/06/2001 TIME: 16:04:47

Input Set : A:\402gseq.002

Output Set: N:\CRF3\02062001\1724693A.raw

Does Not Comply Corrected Diskette Needed

```
SEQUENCE LISTING
C--> 4 (1) GENERAL INFORMATION:
             (i) APPLICANT: Hadlaczky, Gyula
                            Szalay, Aladar
C--> 9
            (ii) TITLE OF INVENTION: ARTIFICIAL CHROMOSOMES, USES THEREOF
     1.0
                                     AND METHODS FOR PREPARING ARTIFICIAL CHROMOSOMES
     1.2
           (iii) NUMBER OF SEQUENCES: 34
                                                                                              RECEIVED
            (iv) CORRESPONDENCE ADDRESS:
     14
     15
                  (A) ADDRESSEE: Heller Ehrman White & McAuliffe
                  (B) STREET: 4250 Executive Square, 7th Floor
     17
                  (C) CITY: La Jolla
                                                                                                 FEB 20 7001
                  (D) STATE: CA
     1.8
     19
                  (E) COUNTRY: USA
     20
                  (F) ZIP: 92037
             (V) COMPUTER READABLE FORM:
                                                                                             TECH CENTER 1600/2900
     23
                  (A) MEDIUM TYPE: Diskette
     24
                  (B) COMPUTER: IBM Compatible
     25
                  (C) OPERATING SYSTEM: DOS
     26
                  (D) SOFTWARE: FastSEQ Version 1.5
           (vi) CURRENT APPLICATION DATA:
C--> 29
                  (A) APPLICATION NUMBER: US/09/724,693A
C--> 30
                  (B) FILING DATE: 28-Nov-2000
    50
                  (C) CLASSIFICATION:
C--> 47
          (vii) PRIOR APPLICATION DATA:
                  (A) APPLICATION NUMBER: 08/835,682
     34
                  (B) FILING DATE: 10-APR-1997
     38
                  (A) APPLICATION NUMBER: 08/695,191
                  (B) FILING DATE: 07-AUG-1996
    43
                  (A) APPLICATION NUMBER: 08/682,080
                  (B) FILING DATE: 15-JUL-1996
    48
                  (A) APPLICATION NUMBER: 08/629,822
                  (B) FILING DATE: 10-APR-1996
    49
         (viii) ATTORNEY/AGENT INFORMATION:
    52
                  (A) NAME: Seidman, Stephanie L
                  (B) REGISTRATION NUMBER: 33,779
    55
                  (C) REFERENCE/DOCKET NUMBER: 24601-402G
    58
           (ix) TELECOMMUNICATION INFORMATION:
    59
                  (A) TELEPHONE: 858-450-8403
    60
                  (B) TELEFAX: 858-587-5360
                  (C) TELEX:
    63 (2) INFORMATION FOR SEQ ID NO: 1:
    65
            (i) SEQUENCE CHARACTERISTICS:
    66
                  (A) LENGTH: 1293 base pairs
    67
                  (B) TYPE: nucleic acid
```

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear (ii) MOLECULE TYPE: Genomic DNA

69

RAW SEQUENCE LISTING DATE: 02/06/2001 PATENT APPLICATION: US/09/724,693A TIME: 16:04:47

Input Set : A:\402gseq.002

Output Set: N:\CRF3\02062001\1724693A.raw

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(iii) HYPOTHETICAL: NO
C--> 73
            (iv) ANTI-SENSE: NO
W--> 74
             (V) FRAGMENT TYPE:
     75
             (vi) ORIGINAL SOURCE:
     76
            (ix) FEATURE:
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
     78
     80 GAATTCATCA TITTTCANGT CCTCAAGTGG ATGTTTCTCA TITNCCATGA TITTAAGTTT
                                                                                60
     81 TCTCGCCATA TTCCTGGTCC TACAGTGTGC ATTTCTCCAT TTTNCACGTT TTNCAGTGAT
                                                                               120
        TTCGTCATTT TCAAGTCCTC AACTGGATGT TTCTCATTTN CCATGAATTT CAGTTTTCTN
     82
                                                                               180
         GCCATATTCC ACGTCCTACA GNGGACATTT CTAAATTTNC CACCTTTTTC AGTTTTCCTC
        GCCATATTTC ACGTCCTAAA ATGTGTATTT CTCGTTTNCC GTGATTTTCA GTTTTCTCGC
                                                                               300
     85 CAGATTCCAG GTCCTATAAT GTGCATTTCT CATTINNCAC GTTTTTCAGT GATTTCGTCA
                                                                               360
     86 TTTTTCAAG TCGGCAAGTG GATGTTTCTC ATTTNCCATG ATTTNCAGTT TTCTTGNAAT
                                                                               420
     87
         ATTCCATGTC CTACAATGAT CATTTTTAAT TTTCCACCTT TTCATTTTTC CACGCCATAT
        TTCATGTCCT AAAGTGTATA TTTCTCCTTT TCCGCGATTT TCAGTTTTCT CGCCATATTC
        CAGGTCCTAC AGTGTGCATT CCTCATTTTT CACCTTTTTC ACTGATTTCG TCATTTTTCA
                                                                              600
        AGTCGTCAAC TGGATCTTTC TAATTTTCCA TGATTTTCAG TTATCTTGTC ATATTCCATG
                                                                              660
     91 TCCTACAGTG GACATTTCTA AATTTTCCAA CTTTTTCAAT TTTTCTCGAC ATATTTGACG
                                                                              720
         TGCTAAAGTG TGTATTTCTT ATTTTCCGTG ATTTTCAGTT TTCTCGCCAT ATTCCAGGTC
         CTAATAGTGT GCATTTCTCA TTTTTCACGT TTTTCAGTGA TTTCGTCATT TTTTCCAGTT
                                                                              840
         GTCAAGGGGA TGTTTCTCAT TTTCCATGAG TGTCAGTTTT CTTGCTATAT TCCATGTCCT
                                                                              900
     95 ACAGTGACAT TTCTAAATAT TATACCTTTT TCAGTTTTTC TCACCATATT TCACGTCCTA
                                                                              960
        AAGTATATAT TTCTCATTTT CCCTGATTTT CAGTTTCCTT GCCATATTCC AGGTCCTACA
                                                                             1020
         GTGTGCATTT CTCATTTTC ACGTTTTTCA GTAATTTCTT CATTTTTAA GCCCTCAAAT
        GGATGTTTCT CATTTTCCAT GATTTTCAGT TTTCTTGCCA TATACCATGT CCTACAGTGG
                                                                             1140
     99 ACATTTCTAA ATTATCCACC TTTTTCAGTT TTTCATCGGC ACATTTCACG TCCTAAAGTG
                                                                             1200
     100 TGTATTCTA ATTTCAGTG ATTTCAGTT TTCTCGCCAT ATTCCAGGAC CTACAGTGTG
                                                                              1260
     101 CATTTCTCAT TTTTCACGTT TTTCAGTGAA TTC
                                                                              1293
     103 (2) INFORMATION FOR SEO ID NO: 2:
     105
             (i) SEQUENCE CHARACTERISTICS:
     106
                   (A) LENGTH: 1044 base pairs
     107
                   (B) TYPE: nucleic acid
     1.08
                  (C) STRANDEDNESS: single
     109
                  (D) TOPOLOGY: linear
             (ii) MOLECULE TYPE: Genomic DNA
     111
    112
            (iii) HYPOTHETICAL: NO
C--> 113
            (iv) ANTI-SENSE: NO
W--> 114
             (V) FRAGMENT TYPE:
    115
            (vi) ORIGINAL SOURCE:
    116
            (ix) FEATURE:
    118
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
    120 AGGCCTATGG TGAAAAAGGA AATATCTTCC CCTGAAAACT AGACAGAAGG ATTCTCAGAA
                                                                                60
    121 TCTTATTTGT GATGTGCGCC CCTCAACTAA CAGTGTTGAA GCTTTCTTTT GATAGAGCAG
         TTTTGAAACA CTCTTTTTGT AAAATCTGCA AGAGGATATT TGGATAGCTT TGAGGATTTC
                                                                               180
    123 CGTTGGAAAC GGGATTGTCT TCATATAAAC CCTAGACAGA AGCATTCTCA GAAGCTTCAT
                                                                               240
    124 TGGGATGTTT CAGTTGAAGT CACAGTGTTG AACAGTCCCC TTTCATAGAG CAGGTTTGAA
                                                                               300
         ACACTCTTTT TTGTAGTATC TGGAAGTGGA CATTTGGAGC GATCTCAGGA CTGCGGTGAA
    125
                                                                               360
         AAAGGAAATA TCTTCCAATA AAAGCTAGAT AGAGGCAATG TCAGAAACCT TTTTCATGAT
    127 GTATCTACTC AGCTAACAGA GTTGAACCTT CCTTTGAGAG AGCAGTTTTG AAACACTCTT
                                                                               480
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RAW SEQUENCE LISTING DATE: 02/06/2001 PATENT APPLICATION: US/09/724,693A TIME: 16:04:47

Input Set : A:\402qseq.002

Output Set: N:\CRF3\02062001\1724693A.raw

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128 TTTGTGGAAT CTGCAAGTGG ATATTTGTCT AGCTTTGAGG ATTTCGTTGG GAAACGGGAT
                                                                                540
     129 TACATATAAA AAGCAGACAG CAGCATTCCC AGAAACTTCT TTGTGATGTT TGCATTCAAG
                                                                                600
     130
          TCACAGAGTT GAACATTCCC TTTCATAGAG CAGGTTTGAA ACACACTTTT TGATGTATCT
                                                                                660
     131 GGATGTGGAC ATTTGCAGCG CTTTCAGGCC TAAGGTGAAA AGGAAATATC TTCCCCTGAA
                                                                                720
         AACTAGACAG AAGCATTCTC AGAAACTTAT TTGTGATGTG CGCCCTCAAC TAACAGTGTT
                                                                                780
          GAAGCTTTCT TTTGATAGAG GCAGTTTTGA AACACTCTTT TGTGGAATCT GCAAGTGGAT
     133
                                                                                840
         ATTTGTCTAG CTTTGAGGAT TTCTTTGGAA ACGGGATTAC ATATAAAAAG CAGACAGCAG
                                                                                900
          CATTCCCAGA ATCTTGTTTG TGATGTTTGC ATTCAAGTCA CAGAGTTGAA CATTCCCTTT
     135
                                                                                960
         CAGAGAGCAG GTTTGAACAC TCTTTTTATA GTATCTGGAT GTGGACATTT GGAGCGCTTT
     136
                                                                               1020
     137
         CAGGGGGGAT CCTCTAGAAT TCCT
     141 (2) INFORMATION FOR SEQ ID NO: 3:
              (i) SEQUENCE CHARACTERISTICS:
     144
                   (A) LENGTH: 2492 base pairs
     145
                   (B) TYPE: nucleic acid
     146
                   (C) STRANDEDNESS: single
                   (D) TOPOLOGY: linear
     147
     149
             (ii) MOLECULE TYPE: Genomic DNA
     150
            (iii) HYPOTHETICAL: NO
C--> 151
             (iv) ANTI-SENSE: NO
             (v) FRAGMENT TYPE:
W--> 152
             (vi) ORIGINAL SOURCE:
     153
     1.54
             (ix) FEATURE:
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
     156
    158 CTGCAGCTGG GGGTCTCCAA TCAGGCAGGG GCCCCTTACT ACTCAGATGG GGTGGCCGAG
        TAGGGGAAGG GGGTGCAGGC TGCATGAGTG GACACAGCTG TAGGACTACC TGGGGGCTGT
                                                                                1.20
         GGATCTATGG GGGTGGGGAG AAGCCCAGTG ACAGTGCCTA GAAGAGACAA GGTGGCCTGA
                                                                                180
         GAGGGTCTGA GGAACATAGA GCTGGCCATG TTGGGGCCAG GTCTCAAGCA GGAAGTGAGG
                                                                                240
    162 AATGGGACAG GCTTGAGGAT ACTCTACTCA GTAGCCAGGA TAGCAAGGAG GGCTTGGGGT
         TGCTATCCTG GGGTTCAACC CCCCAGGTTG AAGGCCCTGG GGGAGATGGT CCCAGGACAT
                                                                                360
         ATTACAATGG ACACAGGAGG TTGGGACACC TGGAGTCACC AAACAAAACC ATGCCAAGAG
                                                                               420
         AGACCATGAG TAGGGGTGTC CAGTCCAGCC CTCTGACTGA GCTGCATTGT TCAAATCCAA
                                                                               480
         AGGGCCCCTG CTGCCACCTA GTGGCTGATG GCATCCACAT GACCCTGGGC CACACGCGTT
                                                                               540
    167
         TAGGGTCTCT GTGAAGACCA AGATCCTTGT TACATTGAAC GACTCCTAAA TGAGCAGAGA
    168
         TTTCCACCTA TTCGAAACAA TCACATAAAA TCCATCCTGG AAAAAGCCTG GGGGATGGCA
                                                                               660
         CTAAGGCTAG GGATAGGGTG GGATGAAGAT TATAGTTACA GTAAGGGGTT TAGGGTTAGG
    169
                                                                               720
    170
         GATCAACGTT GGTTAGGAGT TAGGGATACA GTAGGGTACC GGTAGGGTTA GGGGTTAGGG
                                                                               780
         TTAGGGGTTA GGGTTAGGGT TAGGGTTAGG GTTAGGGTTA GGGGTTAGGG GTTAGGGTTA
    171
                                                                               840
    172
         GGGTTAGGTT TTGGGGTGGC GTATTTTGGT CTTATACGCT GTGTTCCACT GGCAATGAAA
                                                                               900
    173 AGAGTTCTTG TTTTTCCTTC AGCAATTTGT CATTTTTAAA AGAGTTTAGC AATTCTAACA
                                                                               960
         GATATAGACC AGCTGTGCTA TCTCATTGTG GTTTTCAATT GTAACCACAT TGTGGTTTCA
    1.74
                                                                              1020
         ATGTGTTTAC TTGCCATCTG TAGATCTTCT TTGCGTGAGG TGTCTGTTCA GATGTGTGTG
                                                                              1080
    176 CATTTCTTGN NTTTNGGCTG TTTAACTTAT TGTTTAGTTT TAATAATTTT TTATATATTT
                                                                              1140
    177
         GAAGACAAAT CTTTCTCAGA TGTGTATTTG CAAATATTTC TTCAATATGA GGCTTGCTTT
    1.78 TGTCTCTAAC AAGGTCTCTT CAGAGATAAC TTAAATATAA GAAATCCACA CTGTCACTTC
                                                                              1260
    179 TTTTGTGTAT ATCTACCTTT TGTGTCATTT GTTAAAATTC ATTACCAAAC CCAAAGGCAG
                                                                              1320
         ATAGCTTTTC TTCTATTGTT TCTTCTAGAA ATTTGTATAG TTTTGCATTT TTAGTGTAAG
                                                                              1380
    181 GATGATTTTG AGTGATTATT TGTGTAAGTT GTAAAGTTTT CGTCTATATC CATATCATTT
                                                                              1440
    182 CTTATGGTTT CCAATTAATC GTTCCCTCAC TATTTTTGGG AAAGACACAG GATAGTGGGC
         TTTGTTAGAG TAGATAGGTA GCTAGACATG AACAGGAGGG GGCCTCCTGG AAAAGGGAAA
```

FEB 20 2001

TECH CENTER 1600/2900

1560

 RAW SEQUENCE LISTING
 DATE: 02/06/2001

 PATENT APPLICATION:
 US/09/724,693A
 TIME: 16:04:47

Input Set : A:\402gseq.002

Output Set: N:\CRF3\02062001\I724693A.raw

```
184 GTCTGGGAAG GCTCACCTGG AGGACCACCA AAAATTCACA TATTAGTAGC ATCTCTAGTG
     185 CTGGAGTGGA TGGGCACTTG TCAATTGTGG GTAGGAGGGA AAAGAGGTCC TATGCAGAAA
     186 GAAACTCCCT AGAACTCCTC TGAAGATGCC CCAATCATTC ACTCTGCAAT AAAAATGTCA
                                                                            1740
     187 GAATATTGCT AGCTACATGC TGATAAGGNN AAAGGGGACA TTCTTAAGTG AAACCTGGCA
                                                                            1800
     188 CCATAGGTAC AGATTAGGGC AGAGAAGGAC ATTCAAAAGA GGCAGGCGCA GTAGGTACAA
     189 ACCTGATCGC TCTCAGTGTG CCTGGGATGG CGGGAAGGAG GCTGGTGCCA GAGTGGATTC
                                                                            1920
     190 GTATTGATCA CCACACATAT ACCTCAACCA ACAGTGAGGA GGTCCCACAA GCCTAAGTGG
                                                                            1980
     191
         GGCAAGTTGG GGAGCTAAGG CAGTACCAGG AAAACCAGAC AAAGAAAACA GGTGGAGACT
                                                                            2040
         21.00
     193 GCTGTTTAAT GCATCGCTCA GTCCCACTCC TCCCTATTTT TCTACAATAA ACTCTTTACA
                                                                            2160
         CTCTGTTTCT TTTCAATGAA GTTATCTGCC ATCTTTGTAT TGCCTCTTGG TGAAAATGTT
     194
                                                                            2220
     195 TCTTCCAAGT TAAACAAGAA CTGGGACATC AGCTCTCCCC AGTAATAGCT CCGTTTCAGT
                                                                            2280
     196 TTGAATTTAC AGAACTGATG GGCTTAATAA CTGGCGCTCT GACTTTAGTG GTGCAGGAGG
                                                                            2340
         CCGTCACACC GGGACCAAGA GTGCCCTGCC TAGTCCCCAT CTGCCCGCAG GTGGCGGCTG
     198 CCTCGACACT GACAGCAATA GGGTCCGGCA GTGTCCCCAG CTGCCAGCAG GGGGCGTACG
                                                                            2460
     199 ACGACTACAC TGTGAGCAAG AGGGCCCTGC AG
                                                                            2492
     201 (2) INFORMATION FOR SEQ ID NO: 4:
             (i) SEQUENCE CHARACTERISTICS:
                  (A) LENGTH: 28 base pairs
     204
     205
                  (B) TYPE: nucleic acid
     206
                  (C) STRANDEDNESS: single
     207
                  (D) TOPOLOGY: linear
            (ii) MOLECULE TYPE: Genomic DNA
     209
           (iii) HYPOTHETICAL: NO
     210
            (iv) ANTI-SENSE: NO
C--> 211
W--> 212
             (v) FRAGMENT TYPE:
            (vi) ORIGINAL SOURCE:
     213
     214
            (ix) FEATURE:
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
     216
         GGGGAATTCA TTGGGATGTT TCAGTTGA
                                                                            28
     218
     220 (2) INFORMATION FOR SEQ ID NO: 5:
             (i) SEQUENCE CHARACTERISTICS:
    222
     223
                  (A) LENGTH: 29 base pairs
                  (B) TYPE: nucleic acid
     225
                  (C) STRANDEDNESS: single
                  (D) TOPOLOGY: linear
     226
            (ii) MOLECULE TYPE: Genomic DNA
    228
     229
           (iii) HYPOTHETICAL: NO
            (iv) ANTI-SENSE: NO
C--> 230
             (v) FRAGMENT TYPE:
W--> 231
    232
            (vi) ORIGINAL SOURCE:
    233
            (ix) FEATURE:
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
    237 CGAAAGTCCC CCCTAGGAGA TCTTAAGGA
                                                                            29
    239 (2) INFORMATION FOR SEQ ID NO: 6:
             (i) SEQUENCE CHARACTERISTICS:
    241
                  (A) LENGTH: 47 base pairs
                  (B) TYPE: nucleic acid
    243
    244
                  (C) STRANDEDNESS: single
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```
PATENT APPLICATION: US/09/724,693A
                                                             TIME: 16:04:47
                     Input Set : A:\402gseq.002
                     Output Set: N:\CRF3\02062001\1724693A.raw
                   (D) TOPOLOGY: linear
             (ii) MOLECULE TYPE: DNA
W--> 247
            (iii) HYPOTHETICAL: NO
    248
C--> 249
             (iv) ANTI-SENSE: NO
W~-> 250
             (V) FRAGMENT TYPE:
             (vi.) O. IGINAL SOURCE:
     251
             (ix) FEATURE:
     252
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
     254
                                                                           . 47
     256 CCGCTTAATA CTCTGATGAG TCCGTGAGGA CGAAACGCTC TCGCACC
     260 (2) INFORMATION FOR SEQ ID NO: 7:
              (i) SEQUENCE CHARACTERISTICS:
     262
                   (A) LENGTH: 25 base pairs
     263
     264
                   (B) TYPE: nucleic acid
                   (C) STRANDEDNESS: single
     265
                   (D) TOPOLOGY: linear
     266
             (ii) MOLECULE TYPE: Genomic DNA
     268
     269
            (iii) HYPOTHETICAL: NO
C--> 270
            (iv) ANTI-SENSE: NO
              (V) FRAGMENT TYPE:
W--> 271
             (vi) ORIGINAL SOURCE:
     272
     273
             (ix) FEATURE:
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
     277 CGATTTAAAT TAATTAAGCC CGGGC
                                                                              25
     280 (2) INFORMATION FOR SEQ ID NO: 8:
     282
              (i.) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 27 base pairs
                   (B) TYPE: nucleic acid
     284
                   (C) STRANDEDNESS: single
     285
     286
                   (D) TOPOLOGY: linear
             (ii) MOLECULE TYPE: Genomic DNA
     289
            (iii) HYPOTHETICAL: NO
            (iv) ANTI-SENSE: NO
C--> 290
W--> 291
             (V) FRAGMENT TYPE:
     292
             (vi) ORIGINAL SOURCE:
     293
             (ix) FEATURE:
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
     295
                                                                              27
     297 TAAATTTAAT TAATTCGGGC CCGTCGA
     299 (2) INFORMATION FOR SEQ ID NO: 9:
             (i) SEQUENCE CHARACTERISTICS:
                   (A) LENGTH: 69 base pairs
     302
                   (B) TYPE: nucleic acid
     303
     304
                   (C) STRANDEDNESS: single
                   (D) TOPOLOGY: linear
            (ii) MOLECULE TYPE: Genomic DNA
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
     310
     312 ATG TAC AGG ATG CAA CTC CTG TCT TGC ATT GCA CTA AGT CTT GCA CTT
                                                                             anis and
     313 Met Tyr Arg Met Gln Leu Leu Ser Cys Ile Ala Leu Ser Leu Ala Leu 🗲
W--> 315 GTC ACA AAC AGT GCA CCT ACT
     316 Val Thr Asn Ser Ala Pro Thr
```

RAW SEQUENCE LISTING

DATE: 02/06/2001

 VERIFICATION SUMMARY
 DATE: 02/06/2001

 PATENT APPLICATION:
 US/09/724,693A
 TIME: 16:04:48

Input Set : A:\402gseq.002

Output Set: N:\CRF3\02062001\1724693A.raw

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L:4 M:220 C: Keyword misspelled or invalid format, [(1) GENERAL INFORMATION:]
L:9 M:220 C: Keyword misspelled or invalid format, {(ii) TITLE OF INVENTION:]
L:29 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:30 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:37 M:220 C: Keyword misspelled or invalid format, [(vii) PRIOR APPLICATION DATA:]
L:42 M:220 C: Keyword misspelled or invalid format, [(vii) PRIOR APPLICATION DATA:]
L:47 M:220 C: Keyword misspelled or invalid format, [(vii) PRIOR APPLICATION DATA:]
L:73 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:78 M:246 W: 1nvalid value of Alpha Sequence Header Field, [FEATURE:], SeqNo=1, Value=[]
L:74 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=1, Value=[]
L:113 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:118 M:246 W: Invalid value of Alpha Sequence Header Field, [FEATURE:], SeqNo=2, Value=[]
L:114 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=2, Value=[]
L:151 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:156 M:246 W: Invalid value of Alpha Sequence Header Field, [FEATURE:], SeqNo=3, Value=[]
L:152 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=3, Value=[]
L:211 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:216 M:246 W: Invalid value of Alpha Sequence Header Field, [FEATURE:], SeqNo=4, Value=[]
L:212 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=4, Value=[]
L:230 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:235 M:246 W: Invalid value of Alpha Sequence Header Field, [FEATURE:], SeqNo=5, Value=[]
L:231 M:246 W: Invalid value of Alpha Sequence Header Field, [FRACMENT TYPE:], SeqNo=5, Value=[]
L:249 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:254 M:246 W: Invalid value of Alpha Sequence Header Field, [FEATURE:], SeqNo=6, Value=[]
L:247 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6, Value=[DNA]
L:250 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=6, Value=[]
L:270 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:275 M:246 W: Invalid value of Alpha Sequence Header Field, [FEATURE:], SeqNo=7, Value=[]
L:271 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=7, Value=[]
L:290 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:295 M:246 W: Invalid value of Alpha Sequence Header Field, [FEATURE:], SeqNo=8, Value=[]
L:291 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=8, Value=[]
L:308 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:308 M:220 C: Keyword misspelled or invalid format, Poss data loss, Seq 9, (D) OTHER INFORMATION:
L:315 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:9
L:339 M:220 C: Keyword misspelled or invalid format, [(H) DOCUMENT NUMBER:] L:433 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:438 M:246 W: Invalid value of Alpha Sequence Header Field, [FEATURE:], SeqNo=11, Value=[]
L:434 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=11, Value=[]
L:452 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:457 M:246 W: Invalid value of Alpha Sequence Header Field, [FEATURE:], SeqNo=12, Value=[] L:453 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=12, Value=[]
L:471 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:472 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=13, Value=[]
L:512 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:513 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=14, Value=[]
L:553 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:554 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=15, Value=[]
```

4

VERIFICATION SUMMARY DATE: 02/06/2001
PATENT APPLICATION: US/09/724,693A TIME: 16:04:48

Input Set : A:\402gseq.002

Output Set: N:\CRF3\02062001\1724693A.raw

```
L:593 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:594 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=16, Value=[]
L:979 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:980 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=17, Value=[]
L:1713 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1714 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=18, Value=[]
L:1734 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1735 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=19, Value=[]
L:1764 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE: ]
L:1765 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=20, Value=[]
L:1789 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1790 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=21, Value=[]
L:1813 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1814 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=22, Value=[]
L:1837 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1838 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=23, Value=[]
L:1866 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1867 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=24, Value=[]
L:1896 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1897 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=25, Value=[]
L:1914 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1915 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=26, Value=[]
L:1932 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1933 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=27, Value=[]
L:1950 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1951 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=28, Value=[]
L:1968 M:220 C: Keyword misspelled or invalid format, {(iv) ANTI-SENSE:1
L:1969 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=29, Value=[]
L:1987 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1988 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=30, Value=[]
L:2005 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:2006 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=31, Value=[]
L:2023 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:2024 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=32, Value=[]
L:2041 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:2042 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=33, Value=[]
L:2059 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:2060 M:246 W: Invalid value of Alpha Sequence Header Field, [FRAGMENT TYPE:], SeqNo=34, Value=[]
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